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LAND USE PLAN
COASTAL AREA MANAGEMENT ACT OF 1974

BURGAU, NORTH CAROLINA

MAY 4, 1976

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Abstract: Land Use Plan Prepared in Accordance with CAMA of 1974.

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Article I - Introduction

Why have a land use plan for Burgaw? In future years, the Burgaw area will be subjected to increasing pressures which are the result of the often conflicting needs of a society expanding in industrial development, in population, and in the recreational aspirations of its citizens. Unless these pressures are controlled by coordinated management, the very features of the area which make it economically, esthetically, and ecologically rich will be destroyed.

The Coastal Area Management Act of 1974 (CAMA) is a state law that asks local governments in 20 counties in coastal North Carolina to prepare a blueprint for their future growth and development. It is a cooperative program--local government has the initiative for planning; state government establishes Areas of Environmental Concern. With regard to planning, state government shall act primarily in a supportive standard-setting and review capacity. Enforcement shall be a concurrent state-local responsibility.

Throughout the preparation of the Burgaw Land Use Plan, every effort has been made to secure public participation. The vehicles utilized to inform the public and to solicit their involvement include: public meetings held by the Planning Board and Town Council; weekly newspaper coverage of meetings and appearances before local civic groups; and informal meetings and discussions of the results of a survey mailed to 550 citizens.

On November 13, 1975, the preliminary draft of the Burgaw Land Use Plan was presented to the Planning Board for their review. Also, a copy was forwarded to the Coastal Resources Commission (CRC) as required by state guidelines. By January, the Town of Burgaw had received review comments on the preliminary draft conducted by some two dozen state and federal agencies along with the Coastal Resources Commission.

Appropriate revisions have been made and public meetings were held by the Town of Burgaw on May 4 and 10, 1976. The Land Use Plan was adopted by the Town Council on May 18, 1976, for submission to the CRC.

Elements of the Land Use Plan include a statement of local land use objectives, policies and standards, a summary of data collection and analysis, an existing land use map, a land classification map, and detailed description of proposed Areas of Environmental Concern. The Table of Contents of the Land Use Plan suggests the scope of this document which is influenced by the outlined of required and optional data in the "State Guidelines for Local Planning. . ." as adopted by the Coastal Resources Commission on January 27, 1975, and amended on October 15, 1975.

ARTICLE II - PRESENT CONDITIONS

Section I. Population and Economy¹

The population of Burgaw has remained stable over the last few decades. The Town actually experienced a net decline in total population from 1960 to 1970, when it decreased from 1750 persons to 1744 (down 0.3%). The same trend held true for the county with a slight increase occurring during the 1950's followed by a turn downward in the next decade (1960 population = 18,508, 1970 = 18,149).

Cities and towns in Southeastern North Carolina which surround Burgaw exhibited sizeable gains in populations during the last United States Bureau of the Census enumeration --on the other hand, Burgaw held relatively constant. Wilmington, the largest city in the region grew by almost 5%; Southport, a smaller town which has recently acquired several large industries increased by about 9% and is still growing; Jacksonville, the site of a large military complex gained about 19%, and Wallace, which annexed territory grew by nearly 27%. In contrast, the Town of Burgaw witnessed very little expansion of industries or institutions.

The lack of economic opportunity in Burgaw has probably deterred any sort of significant migration of people to the Town from outlying areas. Migration rates, calculated for the period 1960 to 1970, compare a specific age group in 1960 with the same group ten years later in order to measure the number of people who have either come or gone. These statistics reveal that Burgaw is losing population in all but two age groupings. The age brackets which showed increases were the very young and the middle aged, while young adults showed the largest decreases.

Age characteristics for the Town do not differ greatly from those of the State as a whole. The percentage of the population aged under 18 as well as that segment over 65 compares closely with State figures. Burgaw's median age, or that point at which half of the population is older and half are younger, is 31.1 years; the North Carolina median age is 26.5. Burgaw's statistic indicates that a large proportion of its people are concentrated in the

¹North Carolina Department of Natural and Economic Resources
Division of Community Assistance, Southeastern Field Office
Prepared by David Long - February 1975

older and middle aged groupings.

It is interesting to note one significant aspect of Burgaw's demography which is included in a special publication by the U.S. Census known as "Social Indicators." By definition, child population expansion is the ratio of the number of children aged 5-9 to the number of children aged 10-14. This is a measure of the growth of the population through expansion of the number of children. The ratio should be near 1.000 for a population which is replacing itself and below 1.000 for a declining population. Interestingly enough, Burgaw's ratio is exactly 1.000, meaning that it is just barely replacing itself through births. Coupled with a slight out-migration this could result in a net reduction in overall population.

POPULATION:

Population Change 1930 - 1970

	<u>Pender</u>	<u>Burgaw Twp.</u>	<u>Burgaw</u>
1930	15685	3192	1209
1940	17710 (+12.9%)	3517 (+10.2%)	1476 (+22.1%)
1950	18423 (+4.0%)	4068 (+15.7%)	1613 (+9.3%)
1960	18508 (+0.5%)	4135 (+1.6%)	1750 (+8.5%)
1970	18149 (-1.9%)	4422 (+6.9%)	1744 (-0.3%)

Source: US Census 1970

Surrounding Cities: Population Change 1960 - 1970

	<u>1960</u>	<u>1970</u>	<u>Percent Change</u>
Burgaw	1750	1744	-0.3
Southport	2034	2220	+9.1
Wilmington	44013	46169	+4.9
Jacksonville	13491	16021	+18.8
Wallace	2285	2905	+27.1

Source: US Census 1970

Population Characteristics: 1970

	<u>Total</u>	<u>Male</u>	<u>Female</u>	<u>White</u>	<u>Black</u>	<u>Under 18</u>	<u>Over 65</u>	<u>Median A</u>
Pender	18149	49%	51%	56%	44%	36.9%	10.0%	27.4%
Burgaw Twp	4422	49	51	60	39	33.9	10.9	30.0
Burgaw	1744	49	51	56	44	33.0	10.7	31.1
N.C.	5,082,059	49	51	77	22	34.6	8.1	26.5

Source: US Census 1970

Migration Rates: Burgaw 1960 - 1970

	<u>Under 5</u>	<u>5-14</u>	<u>15-24</u>	<u>25-34</u>	<u>35-44</u>	<u>45-54</u>
Ages groups in 1960	160	353	247	211	251	218
Same group 1970	170	285	183	216	217	178
Percent remaining						
1960 - 1970	106%	81%	74%	102%	86%	82%

Source: US Census 1960 - 1970

The economy of a community (and even those of entire nations) is a delicate system which is controlled by a multitude of complex forces. The present ('75) national economy is convincing evidence of just what can happen when a state of imbalance comes into being . . . unemployment, inflation, recession, etc. Statistics relating to the economic situation in a community should not be regarded as final, rather, they are flexible and ever-changing. The 1970 US Census is obviously outdated in this respect, nevertheless, several components which are essential to a study of Burgaw's economic structure deserve attention and will be examined in this section.

A good indicator of a local economy is found in its occupational listing. Some communities contain large proportions of workers in some categories and this information can be used in predicting the direction in which a local economy will tend to move. Perhaps the key feature of Burgaw's occupational breakdown is that segment of the population engaged in manufacturing. Approximately thirty-five percent of all workers in the state were employed in manufacturing as of 1969 while Burgaw employed only 21.5% in this grouping. Pender County is a predominantly agricultural area, and the difference in manufacturing employment is probably accounted for by a large proportion of agriculture-related workers. The Town is itself less oriented toward agriculture and contains a large number of persons engaged in wholesale - retail and professional services. From this analysis, it would appear that there is a favorable potential for attracting industry to Burgaw, which would provide jobs for individuals and also add substantially to the Town's tax base.

Unemployment figures issued by the North Carolina Employment Security Commission for six counties in Southeastern North Carolina show that Pender County consistently had a higher rate of unemployment than its neighbors. During the

period July - November, 1974, Pender averaged 8.6 percent jobless while Carteret County averaged only about 4.0%, or less than half of Pender's rate. Recent estimates place state unemployment at 10.4% and Pender at 14.5%.

Personal income characteristics extracted from the 1970 US Census also reflect the stagnant nature of Pender's economy. Median family income was \$5,390 as opposed to the State's \$7,774. Per capita income, that is, the total income of an area divided by each man, woman and child was \$1,713 versus \$2,492 for North Carolina, a deficiency of more than 32%. Pender County's incidence of poverty is considerably higher than that of the state . . . about one and one-half to two times as high. This problem should merit the close attention of local officials and efforts should be made to close this gap as soon as possible.

Economic projections compiled by the N. C. Department of Administration for Planning Region 0 (Brunswick, Columbus, Pender and New Hanover), although being very general, hint that the discrepancy between national income and that of the region will begin to even out over the next few decades. During the next fifty years, the region's income should rise from a present level of 71% of the national average to about 85% by the year 2020.

ECONOMY:

Occupation By Industry of Employed Persons (1969)

	<u>Pender</u>	<u>Burgaw</u>	<u>N. C.</u>	<u>Urban N.C.</u>
Construction	604 (9.5%)	49 (6.8%)	6.7%	5.4%
Manufacturing	1773 (27.9)	155 (21.5)	35.4	30.8
Transportation, Communications, Utilities, & Sanitation	267 (4.2)	42 (5.8)	5.6	6.1
Wholesale and Retail	1027 (16.2)	164 (22.8)	17.6	20.3
Financial, Insurance, Business and Repair	233 (3.7)	19 (2.6)	5.6	7.0
Health, Education, Welfare, Legal and Misc. Professional Services	758 (12.6)	197 (27.4)	14.2	17.7
Public Administration	365 (5.7)	30 (4.2)	3.5	4.0
Other Industries (Agriculture, Forestry, Fisheries, Mines & Personal Services)	287 (20.3)	64 (8.9)	11.4	8.2
	6354	720	100%	100%

Source: US Census 1970

Personal Income Characteristics (1969)

	<u>Pender Co.</u>		<u>N. C.</u>	
	<u>Total</u>	<u>Black</u>	<u>Total</u>	<u>Black</u>
Median Family Income	\$5390	\$4162	\$7774	\$4803
Mean Family Income	6345	4477	8872	5682
Per Capita Income	1713	991	2492	1342
Persons Below Poverty Level	36%	57%	20%	45%
Families below Poverty Level	29%	50%	16%	39%

Source: U. S. Census 1970

(1969) Distribution of Income for Families

	<u>Pender</u>	<u>Burgaw</u>	<u>N. C.</u>
Less than \$1000	243 (5.5%)	8 (2.0%)	3.4%
1000 - 1999	407 (9.2)	22 (5.5)	5.4
2000 - 2999	373 (8.5)	0 (0.0)	5.7
3000 - 3999	432 (9.8)	52 (13.1)	6.5
4000 - 4999	557 (12.6)	36 (9.0)	7.2
5000 - 5999	492 (11.2)	36 (9.0)	8.0
6000 - 6999	285 (6.5)	28 (7.0)	7.8
7000 - 7999	322 (7.3)	24 (6.0)	7.7
8000 - 8999	291 (6.6)	18 (4.5)	7.6
9000 - 9999	186 (4.2)	19 (4.8)	6.9
10000 - 11999	324 (7.4)	25 (6.3)	11.7
12000 - 14999	304 (6.9)	71 (17.8)	10.6
15,000 - 24,999	163 (3.7)	47 (11.8)	9.0
25,000 - 49,999	13 (0.3)	7 (1.8)	2.0
Over 50,000	16 (0.4)	5 (1.3)	0.5
	4,408 (100%)	398 (100%)	100%

Source: U.S. Census 1970

Unemployment: July - November, 1974

	<u>Pender</u>	<u>New Hanover</u>	<u>Onslow</u>	<u>Columbus</u>	<u>Brunswick</u>	<u>Carteret</u>
July	7.6%	4.2%	6.9%	7.0%	7.3%	3.2%
August	9.1	3.8	5.9	6.9	6.6	2.7
September	9.3	4.2	4.8	7.2	7.4	3.4
October	7.4	4.1	4.9	8.1	7.2	4.5
November	9.7	5.8	8.1	9.5	10.1	6.1
Presently	14.5	7.0	8.7	11.1	12.1	10.0

Source: North Carolina Employment Security Commission

Average Annual Labor Force Estimates 1970-73

<u>Pender County</u>	<u>1973</u>	<u>1972</u>	<u>1971</u>	<u>1970</u>
Civilian Labor Force	7,210	7,040	6,790	6,900
Unemployment, Total	390	310	460	420
Rate of Unemployment	5.4	4.4	6.8	6.1
Employment, Total	6,820	6,730	6,330	6,480
Agricultural Employment	1,070	1,080	1,040	1,140
Nonag. Wage & Salary Empl.	5,350	5,240	4,900	4,940
All Other Nonag. Employment	400	410	390	400

Industry Employment by Place of Work

Manufacturing	580	610	530	580
Food	70	70	70	60
Lumber & Wood	90	90	90	120
Other Manufacturing	420	450	370	400
Non-Manufacturing	2,070	2,000	1,920	1,910
Construction	170	130	80	60
Trns., Comm., & P. Util.	90	110	90	90
Trade	660	610	550	540
Fin., Ins., & Real Estate	50	40	40	30
Service	200	190	270	250
Government	870	880	850	900
Other Nonmanufacturing	30	40	40	40

Source: North Carolina Employment Security Commission

Commuting Patterns. Since commuting is a way of life for many rural residents, commuting patterns play an important role in the economy of a small town. As with much of the preceding economic information, however, commuting patterns are available only on a county basis. Table provides a comparison of 1960 and 1970 commuting patterns for Pender County. Between 1960 and 1970 out-commuting in the county has almost doubled. One implication of this information could be that the county does not have enough jobs to meet employment needs, thus forcing residents to seek employment across county lines. In some instances there may be adequate employment opportunities, but higher salaries make commuting economically attractive. Thus, until Pender County provides enough employment opportunities with more attractive salaries, it might be assumed that county residents will continue to out-commute and towns such as Burgaw will be predominantly bedroom communities as residents will travel some distance for employment.

Table
COMMUTING PATTERNS FOR PENDER COUNTY

County	1960		1970	
	Out- Commuting	In- Commuting	Out- Commuting	In- Commuting
Bladen	20	52	33	49
Brunswick	12	9	88	9
Columbus	8	--	9	0
Craven	0	0	8	0
Cumberland	4	--	0	0
Duplin	395	43	505	128
Jones	0	0	0	8
Lenoir	4	--	0	0
New Hanover	613	129	1,692	168
(Wilmington City)	(--)	(--)	(1,173)	(--)
Onslow	464	23	412	117
Robeson	0	0	0	8
Sampson	30	21	20	51
Wayne	0	0	7	--
Elsewhere	31	41	94	73
TOTAL	1,581	318	2,868	611
Live & Work in Pender County	4,180	4,180	3,385	3,385
Employed Residents	5,761	XXX	6,253	XXX
Persons Working in Pender County	XXX	4,498	XXX	3,996
Net Commuting-Gain (+) or Loss (-)	-1,263		-2,257	

Source: Employment Security Commission of North Carolina, North Carolina Commuting Patterns, 1960 and 1970, Raleigh, (March, 1970).

Section II. Existing Land Use

The existing land use of the Burgaw planning area is illustrated on the next page. The accompanying Table I states the acreage and percentage of each land use category. The classification of land use was made for the most part in accordance with the U.S. Department of Interior's , "A Land-Use Classification System for Use with Remote-Sensor Data." The following is a brief description of the various uses with particular attention given to:

- significant land use compatibility problems;
- major problems which have resulted from unplanned development and which have implications for future use;
- an identification of areas experiencing or likely to experience major change in prdominate land uses;
- areas of environmental concern.

Residential Land Use

This category accounts for 12.3 and 1.4 percent of the land use in the City limits and extraterritorial area, respectively. Residents are almost exclusively single family dwelling units. The first problem regarding residential land use is strip development occurring along the major thoroughfares, particularly in the extraterritorial area. This threatens to "land lock" quantities of desirable land located behind the roads, and increases the possibility of future blight of houses presently being built along these roads. Another consequence of strip development is the connecting driveways along major thoroughfares. Numerous individual driveways greatly decrease the utility of the road and increase the danger to residents and motoring public.

EXISTING LAND USE MAP

Table

Category	Burgaw Land Use		Extraterritorial Jurisdiction	
	Within Corporate Limits		Approximate	
	<u>Acreage</u>	<u>Percent</u>	<u>Acreage</u>	<u>Percent</u>
1. Residential	163.1	12.3	77.4	1.4
2. Commercial	27.3	2.1	9.6	0.1
3. Industrial	13.4	1.0	15.1	0.1
4. Transportation, Communications and Utilities	200.0	15.1	171.2	3.1
5. Government & Institutional	76.8	5.8	17.3	0.1
6. Cultural, Entertainment Recreational	11.2	1.0	95.5	2.0
7. Agriculture	210.0	15.7	2462.3	44.1
8. Forestland	136.8	10.3	2280.5	41.0
9. Undeveloped	487.3	36.7	452.0	8.1
Total	1325.9	100	5580.8	100

Source: Soil Conservation Service, aerial photo 2/20/72

N. C. Department of Natural & Economic Resources, Division of Community Assistance
Windshield Survey 8/75

The second problem relative to residential land use is the condition of homes as witnessed during the land use survey conducted by the Division of Community Assistance personnel in August, 1975. The Bureau of Census in 1970 reported that 14.1 of all housing units (584) in Burgaw lacked some or all plumbing facilities. While the Town of Burgaw is comparable to the State as a whole (14.3 percent of all housing units lacked some or all plumbing facilities) it is a significant amount of substantial housing. *

The extraterritorial jurisdictional area has experienced some changes in predominate land. Increased residential development causing urban sprawl has occurred along Penderlea Road, N.C. 53, and Bridgers Street.

Furthermore, land use in the Burgaw planning area, one finds, is as the case throughout North Carolina: a growing number of mobile homes now and in the future will house families for permanent and vacation housing, therefore, the same considerations should be given the mobile home as is given to the conventional residential dwelling.

Commercial Land Use

Two percent of the land in Burgaw is devoted to commercial uses. No doubt this nominal amount reflects the retail marketing influence of Wilmington. Quite a few businesses have located on U.S. 117 Bypass which serve the motoring public. However, further development along the Bypass threatens the economic stability of the central business district.

Industrial Land Use

Manufacturing is one of the leading industries of employed persons in Burgaw. Table on the next page lists the manufacturing firms in Burgaw.

* U.S. Bureau of Census, Census of Housing, 1970, General Housing Characteristics.

Table
COMPARISON OF SELECTED HOUSING CHARACTERISTICS
BURGAW, PENDER COUNTY, STATE OF NORTH CAROLINA, 1970

	Burgaw	Pender County	North Carolina
Total Housing Units	584	6,758	1,641,222
- % Owner Occupied	63.0	61.1	65.4
- % Renter Occupied	26.7	16.4	31.8
- % In One-Unit Structures	93.3	87.6	82.9
- % Lacking Some or All Plumbing Facilities	16.1	30.6	15.6
- % With 1.01 or more persons per room (Owner Occupied Units)	7.9	10.7	10.2
Median Number of Rooms			
- Owner Occupied	5.6	5.2	5.4
- Renter Occupied	4.4	4.7	4.3
Median Value - Owner Occupied Units	\$11,200	\$6,600	\$12,800
Median Contract Rent			
- Renter Occupied Units	\$46	\$36	\$59

Source: United States Census of Housing, Detailed Housing Characteristics, HC (1)-B 35, (Washington, 1970).

United States Census of Housing, General Housing Characteristics, HC (1) - A 35, (Washington, 1970).

Table Manufacturing Firms in Burgaw^a

Firm	Listed		Year Established	Products	Employees	
	1971	1972			1971-1972	1973
American Foods, Inc.	Yes	Yes	1961	Packing fruits	45 ^b	20-49
Batson Farmers Exchange	Yes	Yes	1957 ^b	Chicken & hog feed	25 ^b	1-4
Burgaw Ice & Coal Co.	Yes	Yes	1946 ^b	Ice	---	1-4
Burgaw Lumber Co., Inc.	Yes	No	--	Furniture stock	---	0
Burgaw Milling Co.	Yes	No	--	Prepared feeds	---	0
Burgaw Packing Co.	Yes	No	--	Slaughter, process, packaging	14 ^b	0
Electronic Components Corp. of N. C.	Yes	Yes	1966	Transformers	300 ^b	100-249
Filto Pipes, Inc.	Yes	Yes	1962	Smoking Pipes	5-9	5-9
Lewis Sausage Co.	Yes	Yes	1960	Sausage products	10-19	10-19
Murphy Brothers Milling Co.	Yes	Yes	1957	Feed & grain	1-4	5-9
Myers Craft Mfg. Co.	Yes	Yes	1958	Wood easels, frames	20-49	20-49

Firm	Listed		Listed	Year Established	Products	Employees	
	1971	1972	1973			1971-1972	1973
Myers Printing Co.	Yes		Yes	1957	Commercial Printing	1-4	1-4
Nunalee Lumber Co.	Yes		No	1945 ^b	Trim, mouldings, jambs	5-9	0
Pender Lumber Co.	Yes		Yes	1949	Lumber, pallets	10-19	10-19
Burgaw Mfg. Co. ^c	Yes		Yes	1962 ^b	Dresses ^c	135 ^b	250-499
Williams Lumber Co.	Yes		Yes	1946	Plywood & metal roof decking	12 ^b	10-19

^a Sources: N. C. Division of Commerce and Industry. 1972. Director of N. C. manufacturing firms, 1972-1973 edition. Raleigh, N. C. and N. C. Division of Commerce and Industry. 1974. Directory of N. C. manufacturing firms, 1974-1975 edition.

^b Data not included in above sources but derived from: Southeastern Economic Development Commission. 1973. An economic data manual on Pender County. Burgaw, N. C.

^c N. C. Division Commerce and Industry editions indicate Burgaw Manufacturing Co. was sold from Top Mode Mfg. Co. of Mechanicsburg, Pa. to Piedmont Industries of Greenville, S. C. Product line was changed from women's dresses to men's trousers.

Four firms listed in 1971-72 were no longer listed in 1973.

Industrial land use occupies approximately an equal amount of land area in town as well as in the extraterritorial area. Percentage wise a very small amount of the total land area is devoted to industrial land use.

Transportation, Communications and Utilities

Transportation, communications, and utilities represent the third largest land use within the City Limits with approximately 15% of the total land. The bulk of this consists of street rights-of-way which are in most cases 60 feet wide.

Burgaw, N.C. 1974 Average Daily Traffic Count *

<u>Location</u>	<u>ADT</u>
U.S. 117 Bypass	4400
West Wilmington Street	2200
Walker Street (U.S. 117 A)	1500
Bridgers Street at N.C. 53 East & U.S. 117 A)	2800

These thoroughfares are the most heavily traveled in the community but do not present any problems in terms of capacity. There are traffic circulation problems with a railroad barrier through the center of Town. Additional problems encountered are: poor soils, drainage, and unpaved streets, particularly west of the railroad tracks. Future subdivisions and thoroughfares need to be better coordinated.

Other uses within this category are sewage treatment plants; public utilities such as electric, gas, and telephone companies' property and radio stations.

Government and Institutional Land Use

This category occupies approximately six percent of land use within the

* N.C. DOT, Division of Highways, Raleigh, 1974.

corporate limits. Some of the occupants are: Pender County Hospital; Courthouse; State, Federal, City, and County offices; prison camps; schools; churches and cemeteries.

Schools in Burgaw are operated by one administrative unit: Pender County School System.

Cultural, Entertainment, and Recreational Land Use

The only land use within this category in town is the ball park on Smith Street (S.R. 1400). There are additional recreational facilities owned by the Pender County School System, but are not at this time commonly used by the general public. A recent survey and the public meetings have identified a tremendous need for recreational opportunities in the Town of Burgaw.

In the extraterritorial area, this category represents the private golf course on East Wilmington Street.

Agriculture and Forestland

These two categories represent 26 percent of the land use within the corporate limits and approximately 85 percent in the extraterritorial area. The amount of acreage was determined by using five soil Conservation Service's aerial photography, (2/20/72). Every effort was made to correctly identify Agriculture and Forestland however, owing to the date of the photography, there are most probably some differences with present use.

Should any significant economic development occur in the future, this category is most likely to experience the greatest transformation. Land that is owned by individual property owners but not forest product companies is more susceptible to this pressure. Thus, it is most important that Agricultural and Forestland conversion to urban land be given careful review so that new uses will be compatible and will not significantly erode an agricultural base.

Undeveloped Land

Undeveloped land is within an urban and built-up super category. It represents vacant, unimproved land without agricultural or forest use. This category represents 36.7 percent of the land in Burgaw--a very significant fact. This is an important resource for prudent development in the future. Town officials should encourage and promote the utilization of this land in order to achieve "economy of scale" in terms of municipal services.

Section III. Current Plans, Policies, and Regulations

Just prior to the enactment of the Coastal Area Management Act, the Town of Burgaw initiated steps to establish a "planning program." Among the steps taken were:

1. execution of a planning services contract to assist the community;
2. adopted an ordinance to establish a Planning Board on July 30, 1973; and,
3. adopted an ordinance establishing extraterritorial jurisdiction on April 2, 1974.

During 1973-74 fiscal year, the contractor provided technical assistance which resulted in the preparation of: Base Mapping, Land Development Plan, and Initial Housing Element.

The following plans have been prepared by Burgaw with technical assistance from the Division of Community Assistance and have significant implications for land use:

<u>Plan</u>	<u>Date Published</u>
Initial Housing Element	June, 1974
Land Development Plan	October, 1974
Community Profile	February, 1975

The following land use control regulations have been adopted by the Town of Burgaw:

<u>Regulation</u>	<u>Date Adopted</u>
N.C. State Building Code (including heating, plumbing, etc.)	
Zoning Ordinance	May, 1959
Subdivision Regulations	November 11, 1975

The Town of Burgaw has been handicapped in enforcing these regulations because of the lack of a town manager and a qualified building inspector.

ARTICLE III - Public Participation Activities

Section I: Public Participation Process

Burgaw is a small rural community situated in the center of Pender County and relatively removed from coastal shorelines. Because of this it was decided that we use a combination of public meetings, appearances before local civic groups and a survey in order to involve the public.

A survey was conducted by mailing 550 questionnaires to persons who receive water and sewer service. The results of the survey of which 20 percent responded are below. Public participation also involved meetings with elected and appointed boards and civic groups with local news media coverage.

The median age of the respondent is 54 years of age --generally of an age group who has more time to complete a questionnaire, but certainly not to be considered a cross section of the community. In 1970 the median age of Burgaw's population was 31 years of age. Of those responding, ninety-six percent live in a single family dwelling. A sample questionnaire appears in the appendix.

Community Growth

The fourth question deals with the amount of community growth desired. Fifty-five percent want a slight increase in population; thirty-five percent want a great increase; while eight percent want the population to remain the same.

Development Preferences

The fifth question asked which type of development would you like to see more or less of in Burgaw? The following types of development are requested most often in order of priority: single-family housing, recreational, industrial, commercial and apartments. The least requested type of development are: mobile homes and condominiums.

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Reasons for Locating

The sixth question deals with the reasons for locating in Burgaw. In most cases, several reasons were indicated thus, of 176 selections: thirty-five percent chose the community because it was close to family and friends; twenty-nine percent because it was close to work; and twenty-three percent said because of the pleasant surroundings. Not a surprising response in view of the median age of the respondee and the size of the community.

Public Expenditures

The seventh question probed which areas do you feel more or less public funds should be spent? The categories receiving the highest number of votes in order were: industrial development, parks and recreational facilities and programs, water and sewer service, fire and police protection, and storm drainage. The categories receiving the fewest number of votes in order were: roads, (it should be pointed out that while this category was number one for less expenditures, it was still less total votes than the category receiving the fewest votes for more expenditures), environmental protection, and garbage collection.

Likes and Dislikes

The eighth question is what do you like most about Burgaw? The responses occurring most often were the people, small size and relative safety of the community and its institutions. The ninth question asked just the opposite. Items mentioned most frequently were: lack of retail trade and services particularly restaurants, non-existent recreation facilities, little or no job opportunity, unavailable sewer service, poor drainage, substandard housing, unsightly and unkept yards, lots and rights-of-way and roaming dogs.

Areas for Preservation

Question number eleven asked for any specific locations which one feels should be preserved or protected in its natural state. The most frequently mentioned areas are: Pender County Courthouse square, hospital, cemetery and old homes. Additional comments repeated in most cases the dislikes mentioned above and the following: The need of doctors, paved streets, street lights and the need to enforce health and land use control ordinances in a less arbitrary manner.

Section II. Major Issues

In order to formulate a series of goals and objectives which can in turn be molded into policies for future development, we must identify the major land use issues facing the Burgaw planning area. The following is a discussion of issues under five broad headings. These issues are current issues and should be considered a refinement of those issues already identified in the Land Development Plan. An issue is defined as, a point of debate or controversy, and only through a discussion of all the issues can we hope to begin to achieve the optimum accommodation of spatial growth.

Impact of Population and Economic Trends

As described on page 1 of the Community Profile, the Burgaw planning area has remained static. While the community has experienced little or no economic development within the last decade and thus, does not have a growth crisis, nevertheless, it does have problems which need to be addressed. Unless these

problems are reversed, the community faces deterioration of its attractiveness.

Growth which has occurred over previous decades was not unmanageable because of its slow rate. However, the growth characteristics are somewhat similar to other communities in North Carolina. Foremost among the growth characteristics which have occurred in Burgaw is "low density sprawl". Low density sprawl is defined as the entire community consisting of single family homes, 75 percent sited in a traditional grid pattern and the rest clustered. Neighborhoods are cited in a leapfrog pattern with little contiguity. While this pattern is not very distinct, in all probability it would be more pronounced should the community experience significant economic development. Unfortunately, the cost analysis of this pattern of development as compared with "combination mix" and "high density planned" reveals that in every factor such as: operating and maintenance cost, water consumption, water pollution generation, energy consumption, land utilization, and capital cost; the overall cost to the neighborhood or community is significantly more. *

This is particularly noticeable in the extraterritorial jurisdiction where residential development has occurred as opposed to the development of available residentially zoned land located within the city limits. The aging solution to this trend--annexation--only perpetuates the problem. Furthermore, residential development is not the only land use affected by urban sprawl. Strip commercial development which is sanctioned by an outdated Zoning Ordinance along U.S. Highway 117 Bypass threatens a very attractive and viable central business district.

The most important impact of recent population and economic growth has been the decline in population, particularly the young age group, coupled with out-migration of young adults leaves Burgaw in a most unfavorable situation.

* Real Estate Research Corp., The Cost of Sprawl, Executive Summary, April 1974, p. 2-8.

Another impact is speculation. Much of the haphazard and unplanned growth occurring around Burgaw can be traced to land speculation. Strip developments as previously mentioned form a thin veneer of intensive land use that hides much larger areas of undeveloped vacant land. Most of these interior lands are being held with the hope that they will eventually command a higher price.

Other land use issues are: loss of open space, use of the best agricultural land for development, and premature land development.

Housing and Other Services

The primary housing and housing related controversies in the Burgaw planning are: public concern over subsidized housing; local responsibility for increasing housing opportunity; absence of vacant standard units; non-available variety of housing; quantity of substandard units; high percentage of substandard units which are rental property; scattered trash and abandoned vehicles throughout the community; absence of paved streets, water, and sewer service within the city limits which coincide with substandard housing areas. These problems are further compounded by the lack of employment opportunities which prevent many families from owning a standard house. *

The major substandard homes are west of the Seaboard Coastline Railroad, on Wright Street, east of Wallace Street, and an area southwest of the intersection of U.S. 117 Business and U.S. 117 Bypass.

Good housing is imperative for industrial growth. Recreation programs and facilities are completely lacking in Burgaw.

Conservation of Productive Natural Resources

While the Burgaw planning area is without applicable Areas of Environmental Concern there are other productive natural resources. Soils, surface water, groundwater, and air quality are productive natural resources which deserve the utmost consideration in the management of these limited natural resources. A thorough examination of these factors begins under the section entitled, "Constraints."

Protection of Important Natural Environments

Probably the most important natural environment in the Burgaw planning area are the good soils suitable for general agricultural purposes and the excellent natural environment for small and big game wildlife. While this environment provides

* Department of Natural and Economic Resources, Division of Community Assistance, Initial Housing Element, Burgaw, North Carolina, June, 1974.

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*
Department of Natural and Economic Resources, DCA Initial Housing Element,
Burgaw, North Carolina, June 1974.

recreation for some and a livelihood for others, it is largely responsible for the settlement of the Burgaw community. The community will seek to expand its economic base thus, there will be added "pressure" for developing these natural environments for a multiple of uses. This environment directly affects a high percentage of the residents in the planning area, therefore it warrants a great deal of protection so that a maximum number of people will continue to benefit from its use.

Protection of Cultural and Historic Resources

There are certain unique features which represent the character of an area. In Burgaw, those features are the Courthouse Square and attractive shade trees lining its streets.

Pender County was formed in 1875 from New Hanover County and Burgaw was chartered in 1879. While the county has a cultural heritage dating back to the revolutionary time (when it was a part of New Hanover County) the Town of Burgaw is a relatively young community. Nevertheless, there are community historic sites in addition to the Courthouse (1936) such as the Burgaw Presbyterian Baptist Churches organized in 1879 and 1886 respectively.

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Section III. Development Alternatives

Due to past economic trends and the distance from ocean shorelines, Burgaw has not had to deal with a growth crisis that many areas have had in the twenty coastal counties.

However, the community is in an excellent position to examine the present development trends and possibly capitalize on its resources.

Basically there are two alternatives for Burgaw. The first alternative, for the lack of a better term is referred to as "low density sprawl". This represents practically no change from the present development pattern. Development as previously experienced would occur without the coordination and timing of community facilities and services. It would locate practically anywhere without regard to land use conflicts and distance to existing water, sewer, solid waste disposal and other services available. Development would continue to occur beyond the city limits with the need for municipal services while large tracts within the city remain undeveloped. Decisions having community wide impact would continue to be made by following the path of least resistance.

The other alternative is one of managed growth. This alternative would require the professional services of a town manager in order to implement policies of the Town Council and insuring maximum return of town resources. This alternative would enable the town to implement objectives enumerated under Section IV., Objectives and Policies for Dealing with Issues, which follows.

Section IV. Objectives and Policies for Dealing with Issues

Burgaw has experienced a very slow rate of growth. The community has not had to deal with a growth crisis to say the least. In fact, very recent trends indicate a loss of population and potential economic decline. Fortunately, this economic stall provides the community an opportunity to make critical decisions about its future. If a community is to remain attractive, then it must expand its economic base so at the bare minimum at least, its young adults may find employment opportunity upon finishing school. The amount and type of change tolerated depends upon the citizens of the community. From all available information (surveys, interviews, public meetings), people in the Burgaw planning area want a viable community, yet they do not want it at the expense of the community's attractiveness. The County conducted a referendum in a special election on October 25, 1975, and a majority of the people voted by a slim margin to establish an Industrial Development Commission. Thus, it is imperative that the Town's elected and appointed officials and citizens vigorously support the goals and objectives enumerated below. Only when these goals and objectives are adopted and adhered to as the Town's policies for land development and future growth, will the community maintain the pleasant characteristics it enjoys today.

In order to avoid any misunderstanding, the frequently used terms of goal, objective and policy are defined as follows:

- goal - a desired future condition;
- objective - a task or course of action to be performed; and
- policy - a commitment to action to reach a goal

In the broadest sense, the goal of Burgaw planning area is to improve the social, economic, and physical environment of the community as economically as possible. Within this broadly stated goal, several specific goals and objectives relating to the physical development of the area can be stated.

Goal: Provide a management system capable of preserving and managing the natural resources in the Burgaw planning area

Objectives:

- . employ a qualified town manager in order to implement plans and programs
- . employ a qualified building inspector to enforce the N.C. State Building Code, Zoning Ordinance and future Subdivision Regulations
- . Obtain involvement of Burgaw citizens in the planning and implementation processes through actively encouraging participation in the democratic proceedings associated with the Town Board, as well as through civic organizations and volunteer groups
- . support the findings of fact and recommendation of appointed boards, commissions, and professional staff

- . prevent developemnt in any future Area of Environmental Concern which would result in a contravention or violation of any rules, regulations, or laws of the State of North Carolina or of the Town of Burgaw and its extraterritorial jurisdiction in which development takes place

Goal: Develop adequate and efficient public utilities and community facilities

Objectives:

- . encourage development within the existing corporate limits and avoid "urban sprawl"
- . provide equal services and facilities to all areas of Burgaw before annexing new areas
- . encourage the use of the county sanitary landfill program by residents within the extraterritorial jurisdiction

Goal: Provide safe, decent, and a variety of housing for all citizens

Objectives:

- . aid property owners in the demolition of dwelling units for human habitation
- . seek, encourage and support the development of publicly assisted housing projects available from Federal agencies such as the Farmer's Home Administration 502 Program
- . establish a zoning district which would permit a mobile home on an individual lot in a specified area
- . support the County Economic Development Commission
- . establish a bona fide industrial park

Goal: Promote accessibility and safety in area transportation

Objectives:

- . emphasize safety and continuous street improvement and construction program
- . mutually adopt a thoroughfare plan with the N.C. Department of Transportation, Division of Highways
- . adopt subdivision regulations

Goal: Preserve the pleasant characteristics of Burgaw

- . establish an appearance commission to preserve the community's aesthetic quality with power to review architectural plans in accordance with G.S. 160A-451
- . support the continuance of the county historic society
- . protect agricultural land for agricultural production

Goal: Provide parks and recreational facilities and programs to meet the recreational needs of all sectors of the Town's population.

Objectives:

- . Establish an adequate park and recreation system by encouraging park dedication and public purchase of lands in the planning area that are suitable for recreational purposes. Based on the standard of 10 acres for 1000 population Burgaw needs

- . of park and recreational land*
- . encourage close coordination between school programs and use of school facilities and the recreational programs of the Town
- . investigate the possibility of establishing limited recreational opportunities such as hike and bike trails and picnicking along Osgood Canal.
- . encourage close cooperation between Town and County recreational programs and facilities

* Robert D. Buechner, ed., National Park, Recreation and Open Space Standards, National Recreation and Park Association, Washington, D.C., page 21.

ARTICLE IV

Section I. Land Potential

A. Physical Limitations

While there are not any known hazard areas, there are areas with soil limitations. The soils of an area will greatly determine the extent of present development and the suitability for future growth. Unless an area has proper soils, urban development that occurs will be costly and may pose a health hazard. Soils occurring together in a characteristic and repeating pattern constitute a general soil area or soil association. An association consists of two or more principal soils and at least one minor soil which may be quite similar to or quite different from each other. Although closely associated geographically, the soils in an association may differ in their suitability for agricultural and non-farm use.

Fortunately, a Soil Survey Special Report has been prepared for Burgaw and the surrounding area. * A Special Soil Survey Map appears on the following page which shows the location and extent of eight soil types in the Burgaw planning area. Included in this report are interpretation sheets which provide information about the physical and chemical properties of soils, the suitability and major features affecting soil as resource material, the capability, soil loss factors and potential yields of soils, and where applicable information on the use of soils for range. Ratings as to the soils degree of limitation for selected uses and the major soil features affecting each of the uses are provided, and in addition the soils are rated as to their suitability for wildlife and suitability for woodland.

The interpretation will not eliminate the need for on-site sampling, testing, and study of specific sites for design and construction of engineering works and various uses. However, the information is useful for (1) those who want a general idea of the soils, (2) those who want to compare the potential of different parts of the planning area, or (3) those who seek the location of areas suitable for specific types of land use. The interpretation sheets should be used primarily to plan more detailed field investigations to determine the conditions of the soil at the proposed site for the intended use. For the purposes of this report, a summary entitled, Soil Interpretation Chart along with the Soils Map is included.

* Soil Conservation Service, Soil Survey Special Report, Burgaw and Surrounding Area, January, 1974

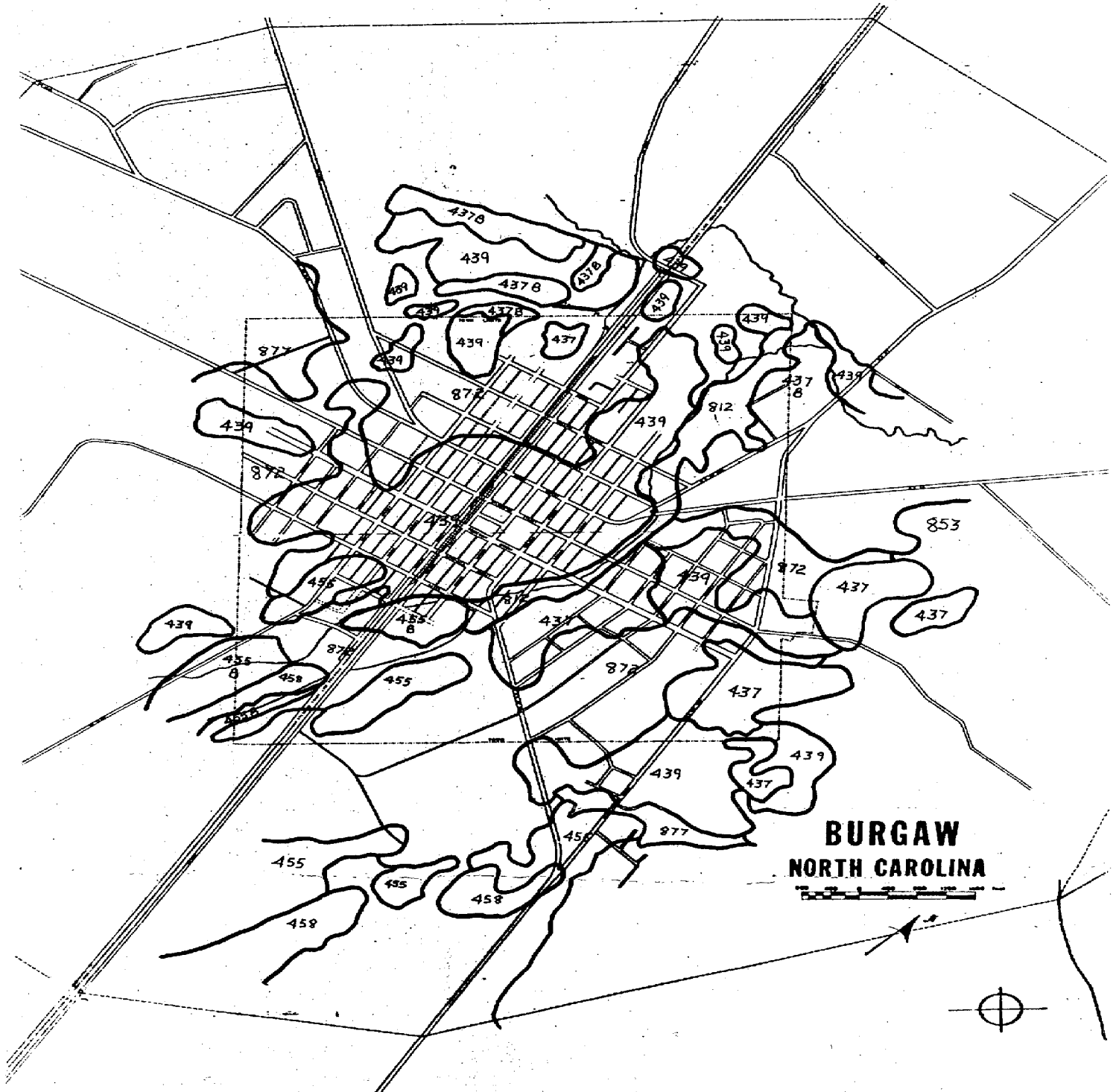
Soil Legend

Map Symbol

437
439
455
458
812
872
877
853

Soil Name

Nixonton very fine sandy loam
Barclay very fine sandy loam
Exum very fine sandy loam
Nahunta very fine sandy loam
Johnston loam
Pasquotank very fine sandy loam
Trebloc very fine sandy loam
Bladen fine sandy loam



Soil Interpretation
General Soil Map
Burgaw, N. C.

LIMITATIONS FOR

Soil Associations	Dwellings with					Recreation			Suitability for	
	Sewerage Systems	Septic Tank Filter Fields	Camp Sites	Picnic Areas	Play Areas	Intensive	Light Industries ^{1/}	Roads and General Streets ^{2/}	Agriculture	Woods
439 Barclay Very Fine Sandy Loam	Mod Wet	Sev Wet; Perc	Mod Wet	Mod Wet	Mod Wet	Mod Wet	Mod Wet	Mod Wet	Good	Good
853 Bladen Fine Sandy Loam	Sev Fl; Wt	Sev Fl; Wt	Sev Fl; Wt	Sev Fl; Wt	Sev Fl; Wt	Sev Fl; Wt	Sev Fl; Wt	Sev Fl; Wt	Poor	Good
455 Exum Very Fine Sandy Loam	Sev Wt	Sev Wt	Slt Wt	Slt	Slt	Slt	Mod Wt	Mod Wt; TSC	Good	Good
812 Johnson Loam	Sev Fl; Wt	Sev Fl; Wt	Sev Fl; Wt	Sev Fl; Wt	Sev Fl; Wt	Sev Fl; Wt	Sev Fl; Wt	Sev Fl; Wt	Poor	Good
458 Nahunta Very Fine Sandy Loam	Sev Wt	Sev Wt	Mod Wt	Mod Wt	Mod Wt	Mod Wt	Mod Wt	Mod Wt	Fair	Good
437 Nixonton Very Fine Sandy Loam	Slt Wt	Mod Wt	Slt	Slt	Slt	Slt	Mod Wt	Mod Wt	Good	Good
872 Pasquotank Very Fine Sandy Loam	Sev Wt; Fl	Sev Wt; Fl	Sev Wt; Fl	Sev Wt; Fl	Sev Wt; Fl	Sev Wt; Fl	Sev Wt; Fl	Sev Wt; Fl	Fair	Good
877 Trebloc	Sev Wt; Fl	Sev Wt; Fl	Sev Wt; Fl	Sev Wt; Fl	Sev Wt; Fl	Sev Wt; Fl	Sev Wt; Fl	Sev Wt; Fl	Fair	Good

Abbreviations for Limiting Factors:

Fl - Flood hazard

Wt - Water Table

Traf - Trafficability

Sh-Sw - Shrink-swell potential

R - Rock

Perc - Percolation rate

Cor - Corrosion potential

TSC - Traffic supporting capacity

Prod - Productivity

AWC - Available water capacity

Definitions of Soils Limitations

None to Soils have properties favorable for the rated use. Limitations are so minor that they can be easily overcome. Good performance and low maintenance can be expected from these soils.

Moderate Soils have properties moderately favorable for the rated use. Limitation can be overcome or modified with planning, design, or special maintenance.

Severe Soils have one or more properties unfavorable for the rated use. Limitations are difficult and costly to modify or overcome, requiring major soil reclamation, special design or intense maintenance.

1/ Structures whose footings are in subsoil

2/ Refers to roads and streets that have subsoil for base

From the Soils Interpretation Chart, we see that the Nixonton (437) has the least limitation for community development (septic tank filter fields, local roads, light industry, and recreation). The next soil with the least overall limitations in Burgaw is Nahunta (458). However this soil has severe limitations for septic tank filter fields. Unfortunately, most of the land in the Burgaw planning area consists of soils other than these two where the high water table is the most limiting factor.

With the exception of Nixonton soils, all the other soils are poorly drained or have considerable wetness characteristics. This has created problems for natural drainage in the Burgaw planning area. This natural characteristic has been compounded by the lack of adequate provision for drainage and storm water control in the development of the community. The Soil Conservation Service has made recommendations for drainage

improvements for the Town.* The recommendation consists of opening up natural drainage ditches and the construction of new ones as indicated on the following map.

Hydrogeology

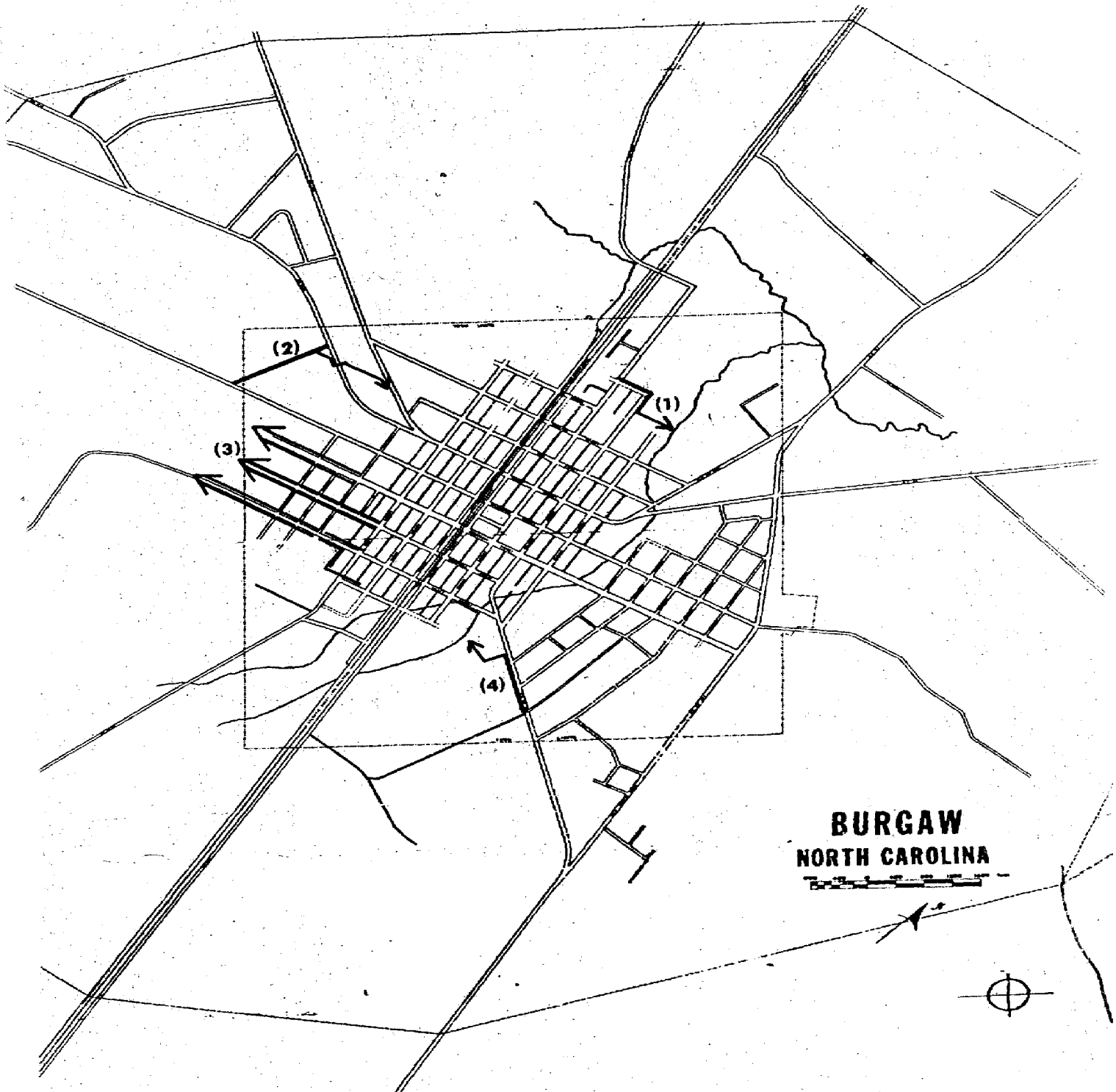
The understanding of the hydrogeology of the area is the first step toward evaluating the availability, occurrence, and chemical quality of the ground water in the planning area. The void spaces between the rock materials that underlie Burgaw constitute the reservoir in which the water is stored and conduits through which the water moves. While a thorough examination of the geology and ground water has not been completed at this time, there are pertinent facts that have been identified by the Regional Hydrologist with the N. C. Department of Natural and Economic Resources.**

The City of Burgaw is located in the Lower Cape Fear River Basin not in proximity to usable class A2 surface waters to supply city water needs. Consequently, the town uses groundwater to satisfy all water needs. Since groundwater is the town's exclusive source of water, the discussion of public water supply watershed, applicable only to surface water supplies

*G. Samuel Cox, Soil Conservation Service "Recommendations for Drainage Improvements for Burgaw Planning Board" September 5, 1974.

**Memorandum from Mr. Richard Shiver, Regional Hydrologist, N. C. Department of Natural and Economic Resources, Wilmington, N. C. September 1975

DRAINAGE IMPROVEMENT



is not appropriate.

Groundwater occurs within two system aquifers in Burgaw. The uppermost aquifer system is a water table aquifer, the Post-Miocene in which potable groundwater is stored in unconsolidated sand. The Post-Miocene Aquifer exists between land surface and an estimated thirty feet below land surface (BLS). Underlying the Post-Miocene Aquifer is the Cretaceous System Aquifer, the most significant aquifer in Burgaw. The upper portion of the Cretaceous System Aquifer is comprised of unconsolidated sands where groundwater exists under artesian conditions; here the water is potable. Unconsolidated sands provide the aquifer framework for the middle and lower portions of the Cretaceous System Aquifer. The middle and lower Cretaceous System Aquifers are suspected of containing brackish groundwater. The Cretaceous System Aquifer exists somewhere between an estimated 30 feet BLS and an estimated 900 feet BLS; basement rock is encountered beneath the Cretaceous System Aquifer.

In Burgaw groundwater recharge occurs to the Post-Miocene Aquifer and to parts of the upper Cretaceous System Aquifer. Direct rainfall infiltrates and, recharges the water table Post-Miocene Aquifer. Interaquifer transfer of groundwater accounts for any recharge into the upper Cretaceous System Aquifer. Recharge most significantly occurs to the Post-Miocene Aquifer.

The Post-Miocene Aquifer in Burgaw is not used as a water supply source since superior quantity and quality groundwater is available in deeper aquifers; however, the Post-Miocene Aquifer does contain good quality water in consequential amounts. Man-made activities which exert

a detrimental effect on the future quantity and quality of groundwater in this aquifer should be avoided.

Three potable water wells screened within the upper Cretaceous System Aquifer provide groundwater supplies to the Town. Three eight inch wells, at a total depth of 350 feet, yield collectively 760 GPM of good quality water at the present time. Because of the depth of the aquifer, it is unlikely future man-made activities in Burgaw would degrade the good quality water presently pumped from the well-field. Nor is the future quantity of groundwater obtainable from this aquifer in jeopardy: the available data suggests the aquifer in question contains enormous amounts of groundwater available for reasonable use.

In summary, planning efforts should be concentrated toward protecting the Post-Miocene Aquifer since this aquifer is most vulnerable to alteration by man.

Also, it should be noted that:

The aquifer hydraulics have never been determined, hence the future availability of groundwater is an unknown;

Each well in the well field should be periodically monitored to detect quantity and quality changes; and

What is Post-Miocene Aquifer in Burgaw may be Upper Cretaceous System Aquifer eastward.

B. Fragile Areas

There are not any known fragile areas as defined by the State Guidelines for Local Planning . . . , in the Burgaw planning area.

C. Resource Potential

Areas of which the most obvious are productive agricultural lands.

not be over emphasized. It is the mainstay of the county's economy.

As noted in Burgaw's existing land use chart and the employees by occupation in Burgaw, it is still important in the Town as well.

As the Town grows and develops, it will continue to serve this segment of the local economy but actual acreage devoted to this land use will in all probability diminish.

Another area of resource potential important to both the Town and the county are game lands and outdoor recreational lands. While there are not any known public or private game lands per se in the Burgaw planning area, there is high potential for these activities. *

* Soil Conservation Service, An Appraisal of Potentials for Outdoor Recreation Development, Pender County March, 1973

Section II. Capacity of Community Facilities

Water System

The Town of Burgaw's water system consists of three wells and collectively they yield 760 gallons per minute. This system is capable of providing 547,200 gallons per day based on a 12 hour demand. In May, 1974, it was estimated that the Town had about 700 water customers and an average daily usage of about 250,000 gallons.* Thus, the water system is presently operating at 46 percent capacity. There are other factors to consider such as water quality, types of water users, equipment and well production before determining excess capacity. Nevertheless, without an analysis of those factors, it appears that 25 percent more of capacity could be utilized and still provide a reasonable safety factor for an emergency.

The area served by the existing water system and proposed improvements are shown on the following map. As the map indicates most all presently developed areas within the Town limits have water service available. Proposed improvement would increase supply capacity, storage capacity, and sufficiently interconnect the distribution system. In view of anticipated demand which is discussed under "Estimated Demand", and the above, it would not seem appropriate to increase supply capacity at this time. To determine the realistic needs of the community in terms of supply capacity, it will require a period of monitoring and evaluating water production.

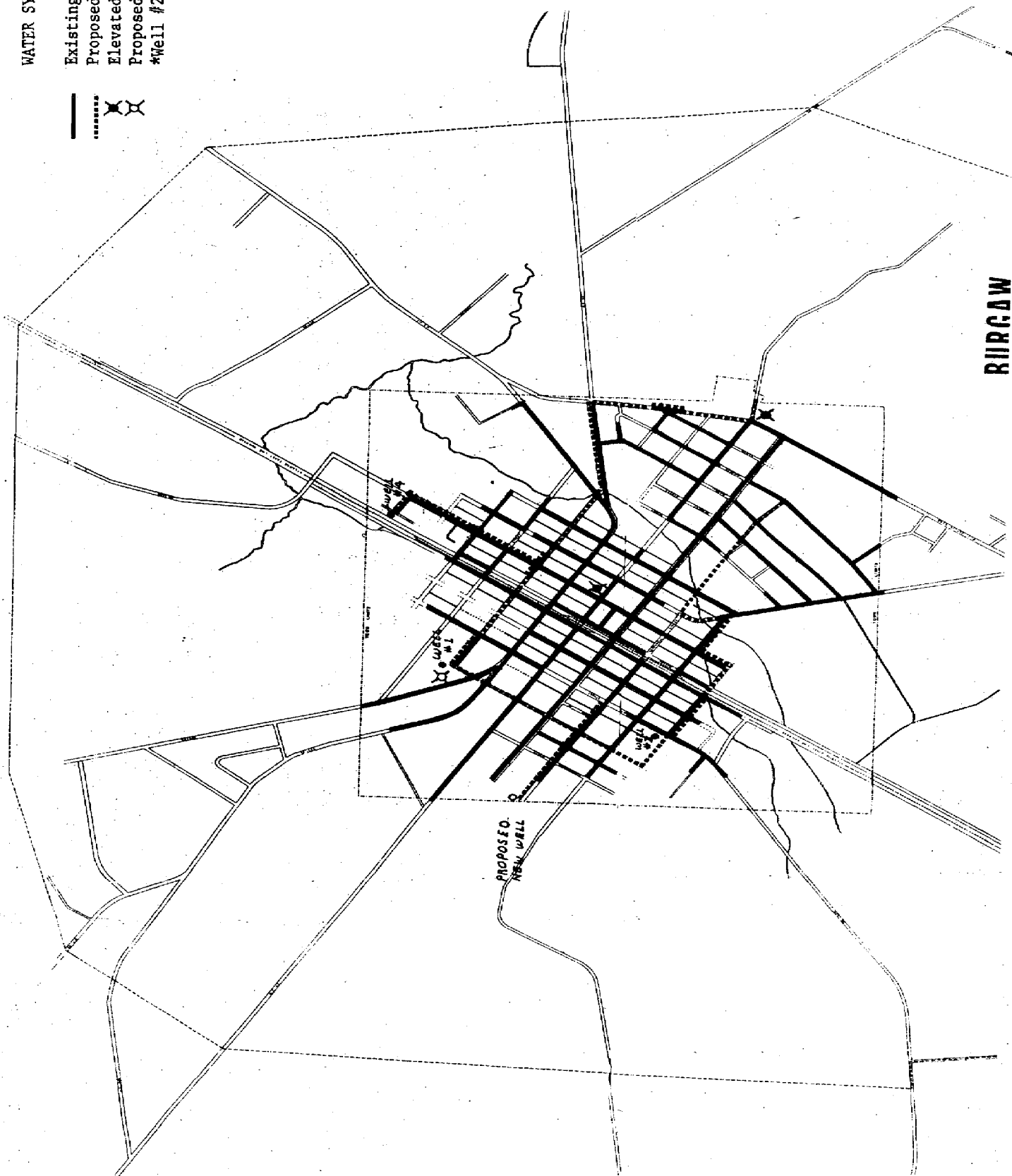
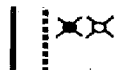
Sewer System

Burgaw's wastewater treatment plant has a design capacity of 300,000 gallons

* Henry von Oesen & Associates, Preliminary Engineering Report, Burgaw, N. C.
May 1974 page 3

WATER SYSTEM

- Existing Water Lines
- Proposed New Water Lines
- Elevated Storage Tank
- Proposed Storage Tank
- *Well #2 Abandoned



BURGAW

per day. The average monthly flow as recorded in October, 1974, was 220,000 gallons per day. The peak flow was 380,000 gallons per day. According to a report prepared by the Division of Environmental Management infiltration problems are considered serious at times, mainly in the older section of Town.* A more recently sampling inspection revealed a flow of 339,000 gallons per day during heavy rainfall before and during the sampling period. The system was bypassing approximately 20% of the flow at the main lift station. It was indicated that bypasses occur frequently during periods of wet weather. The report went on to recommend that the collection system be examined for points of inflow and these points be eliminated. Furthermore, if points of inflow are not identified and wet weather flows reduced then the Town should determine if additional pumping capacity may be installed without damaging the treatment works.* *

Consequently, the Town of Burgaw's wastewater treatment plant is operating at maximum capacity. However, if corrective measures are undertaken to eliminate the serious infiltration then the facility may be reevaluated to determine what additional load it can handle.

The area served by the existing sewer systems and proposed improvements are shown on the following map. As the map indicates there are areas within the Town limits which do not have sewer service available. It is estimated that the proposed extensions would provide about 100 new customers.

However, the project is feasible without these new customers, at the suggested

* N. C. Department of Natural and Economic Resources, Division of Environmental Management Report on Operation and Maintenance of Wastewater Treatment Plant December 17, 1974.

* * N. C. Department of Natural and Economic Resources, Division of Environmental Management Sampling Inspection August 15, 1975

SEWER SYSTEM

- Existing Sewer Lines
- Proposed Sewer Lines



1111111111

rate increases.*

Until such time that the infiltration problems are resolved, then it is recommended that no new customers be provided sewer service.

Thoroughfares

According to the Highway Capacity Manual,** the practical capacity for two lanes plus parking for two way traffic is 5,700-8,200 vehicles per day. Capacity is defined as the maximum number of vehicles which has a reasonable expectation of passing over a given section of a lane or a roadway in both directions during a given time period under prevailing roadway and traffic conditions. According to the North Carolina Department of Transportation's 1974 average daily traffic counts, the most heavily traveled highway is U.S. 117 Bypass with 4400 vehicles per day. However, there are other factors (i.e. design, number of accidents, cost, traffic generators, origin-destination studies, etc.) besides capacity analysis which must be considered before alterations are made.

Education Facilities

See next page

* Henry von Oesen & Associates, Preliminary Engineering Report, Burgaw, N. C. May 1974 page 7

* Highway Research Board, Highway Capacity Manual Special Report 87 1965

There are three educational facilities administered by the Pender County Board of Education which serve Burgaw. These facilities are grossly overcrowded since mobile units and converted shops are being used to house students. The Board of Education is now developing a "school facility needs plan" for the entire County. The Town of Burgaw actually has little or no authority with regard to school policies. Information provided by the Board revealed the following:

Burgaw Elementary School
Design Capacity 450
1975-76 Enrollment 576
Pupil/Teacher ratio - 23:1

Burgaw Junior High School
Design Capacity 300
1975-76 Enrollment 690
Pupil/Teacher ratio - 24:1

Pender High School
Design Capacity 800
1975-76 Enrollment 790
Pupil/Teacher ratio - 21:1

ARTICLE V - ESTIMATED DEMAND

Section I: Population and Economy

In order to better understand population projections and population change, historic population and current estimates are summarized on the next page. Population change is the result of births, deaths, and migration. Migration is the most difficult variable to predict because it is subject to so many outside factors.

Under the historic population we see that the Town of Burgaw's percent increase from 1930 to 1970 has been greater than either Burgaw Township or Pender County. It should also be noted that Burgaw from 1930 to 1970 has represented an average of 9.5 percent of the County's total population.

The two basic sources of regional population projection are the OBERs Series E projection, which uses projected economic growth to account for the regional distribution of population, and the North Carolina Population Projection Model, which is based upon births, deaths, and observed trends (1970-73) in migration. The OBERs Series E data are disaggregated from larger multicounty Bureau of Economic Analysis economic areas. The 1973 adjusted trend projections are adjustments of the previous trend projections based on a comparison of observed migration from 1970-73 with predicted migration.

Due to Burgaw's small size and lack of a data base, it is more accurate to discuss population changes at the county level. As noted in the Community Profile, Burgaw, N. C., Pender County and Burgaw have remained stable over the last few decades. In fact an examination of specific age groups of population for Burgaw revealed that the town was losing population in all but two age groupings. Increases were the very young and the middle aged, while young

HISTORIC POPULATION

Ave. Percent of County 1930-70	1930	1940	Percent Change 1930-40	1950	Percent Change 1940-50	1960	Percent Change 1950-60	1970	Percent Change 1960-70	Percent Change 1930-70
Burgaw*	9.5	1,209	1,476	22.1	1,613	9.3	1,750	1,744	-0.3	44.3
Burgaw Twp.	21.8	3,192	3,517	10.2	4,068	15.7	4,135	4,422	6.9	38.5
Pender Co.		15,686	17,710	12.9	18,423	4.0	18,508	18,149	-1.9	15.7

Source: U.S. Department of Commerce. 1950, 1960, 1970. U.S. Census of Population, North Carolina

Source: U.S. Department of Commerce. 1950, 1960, 1970. U.S. Census of Population, North Carolina

AVERAGE PERMANENT RESIDENT POPULATION

as of July 1

	1973	1974
Burgaw*	1,890	1,860
Pender County	18,800	20,000

* City Only

Source: N.C. Department of Administration, Office of State Planning

POPULATION PROJECTION

	<u>1980</u>	<u>1985</u>	<u>1990</u>	<u>2000</u>
--	-------------	-------------	-------------	-------------

Burgaw*

1973 Adj. Trend	1700	1677	1653	1567
OBER "E"	1776	1833	1890	1928
Cohort Survival	1805	1857	1909	1957
Arithmetic	1878	1928	1978	2069

Pender County

1973 Adj. Trend	17,900	17,650	17,400	16,500
OBER "E"	18,700	19,300	19,900	20,300
Cohort Survival	19,000	19,550	20,100	20,600
Arithmetic	18,765	19,293	19,820	20,084

* City Only

Source: U.S. Department of Commerce, Bureau of Economic Analysis

N.C. Department of Administration, OSP

N.C. Department of Natural and Economic Resources, DCA

adults showed the largest decreases. Also Burgaw's median age is 31.1 years compared to the State's median age of 26.5.

It is felt that recent declines in Burgaw's population are temporary and because of the rapid growth of Wilmington in the last few years that the Town's population will eventually exceed the cohort survival projection. Therefore, the most accurate projection appears to be the cohort survival projection.

Pender County suffers from extensive poverty, low wages, extensive out-commuting, an unbalanced industrial mix, high unemployment, and a low labor force participation rate. Pender County is a predominately agricultural area while the Town of Burgaw is less oriented toward agriculture and contains a large number of persons engaged in wholesale-retail and professional services due to the county seat offices.

Population projections and economic statistics indicate a stagnant economy yet the citizens of Pender County recently held a referendum which was approved by a slim margin to establish an Industrial Development Commission. This fact could very well be the key to the future of Burgaw and Pender County.

Since November, 1974, the unemployment rate has continued to increase: January 1974 - 14.5%; May 1974 - 13.5%; and August 1975 - Projecting future economic conditions is a most difficult task, since many factors are dependent upon the national economy and are beyond the control of the local decision makers.

However, there is a key economic indicator which has been projected by the U. S. Department of Commerce, Bureau of Economic Analysis by regions. In any event there are assumptions made which if proved erroneous, could render the outcome totally invalid. If we apply the 1970 percent of county population of total regional population to regional employment, we arrive at a county projected employment.

	<u>1980</u>	<u>1990</u>	<u>2000</u>
Total County Employment	7938	8778	9923

This compares with 7210 persons in the county's labor force in 1973 (6820 employed and 390 unemployed).

Consequently, barring any sizeable industrial development in Pender County there is little anticipated economic demand at this time.*

Section II. Future Land Use Needs

The existing patterns of development were analyzed under the section entitled "Existing Land Use" in this report. As a basis to understanding future land needs, a summary of existing land use is provided below. Since residential land use is one of the largest developed categories, it deserves special review. There are several methods for forecasting future acreage requirements for new residential construction, all of which have basic assumptions, but normally employ the family or household as the key element.**

* N.C. Department of Administration, Office of State Budget Statistical Abstract page 207 1973

** F. Stuart Chapin, Urban Land Use Planning University of Illinois Press Urban 1965 page 423

Future Land Use Requirements

Within Corporate Limits

<u>Category</u>	<u>1975 Acreage</u>	<u>Approximate Persons per acre</u>	<u>1985 Acreage Requirement*</u>
Residential	163.1	11.4	6.0
Commercial	27.3	68.1	1.0
Industrial	13.4	138.8	0.5
Transportation, Communications and Utilities	200.0	9.3	7.3
Government and Institutional	76.8	24.2	2.8
Cultural, Entertainment Recreational	<u>11.2</u>	166.1	<u>0.4</u>
Subtotal Developed	491.8	3.8	Total 18.0
Agricultural	210.0		
Forestland	136.8		
Undeveloped	<u>487.3</u>		
	1325.9	1.4	

*Does not include safety factor

Source: Land Use Information

Soil Conservation Service aerial photos (2/20/72)

N. C. Department of Natural and Economic Resources, Division
of Community Assistance Windshield Survey 8/75

No. Dwelling Units 592

Based on the present density for the Town of Burgaw, the number of new dwelling units needed in 1985 is 21.7 (1974-1985 population increase of 68 persons divided by 3.14 persons per dwelling units). New dwelling units needed is converted to an acreage requirement of 6 acres (new dwelling units divided by 3.63 dwelling units per residential acre in 1975). This method involves assumptions as to constant household size, stable vacancy rate and no losses in existing stock of dwelling units from demolition, fire or other catastrophes. Because of this and the fact that the method does not provide flexibility for the location of additional employment generators, a safety factor of 50 percent is added to produce a total residential acreage need in 1985 of 9 acres.

Due to a lack of pertinent data and a small amount of acres in the other land use categories, acreage requirements are determined by dividing projected population growth (68 persons) by persons per acre in 1975.

Total acres required to accommodate development in 1985 is 18 acres. If a safety factor of 50 percent is added then, the total acres needed to accommodate all land uses resulting from new growth in 1985 is 27 acres. It must be recognized that this is based on present density and if a large industry located in or near the community additional acres would be necessary.

Section III. Community Facilities Demand

With the exception of the wastewater treatment plant, existing facilities can accommodate the nominal growth projected for Burgaw. It is recommended that the Town of Burgaw concentrate on improving existing facilities and services in order to adequately serve the citizens within the Town. Fortunately, the Town has that opportunity with U.S. Department of Housing and Urban Development Grant under the Community Development Act which has been received by Pender County. Burgaw will share with other communities and the County, the funds received through this program. Burgaw's proposed improvements include \$140,000 for wastewater collection system; \$50,000 for curb, gutter and paving; and \$20,000 for recreation site acquisition and improvement. However, before the wastewater collection system is connected, the wastewater treatment will have to have the capacity to accommodate this increased load (see "Capacity of Community Facilities Sewer System") a fact which it presently does not have. In addition, these improvements will be located in areas which presently do not have these services.

Provided the County's second year application is approved then the Town can expect the following improvements: \$47,500 for curb and gutter, street paving, and storm drainage; \$17,500 for recreation development; and an unspecified amount for housing rehabilitation and demolition.

ARTICLE IV - PLAN IMPLEMENTATION

Section I. Intergovernmental Coordination

Prior to 1974, local land use plans were purely advisory in nature. Local governments often adopted comprehensive plans and then proceeded to ignore them by zoning land and building facilities in a manner inconsistent with the plan. Under the Coastal Area Management Act of 1974 the development of land use plans is just the initial phase of the coastal area management program, for this is a continuing process calling for periodic review (at least once after five years) and revision to keep the plan current, and for management of other governmental actions in a manner consistent with the plans.

The law requires each town desiring to develop its own implementation and enforcement plan to identify a "designated local official" to review, process and issue permits.

While regulations called for in the act relate only to permit authority affecting designated Areas of Environmental Concern, the permits need to be coordinated with both the local land use plan and other existing regulations. The really crucial part of the program will be to see if the local plans can be effectively used to guide government actions-- by local, State and Federal agencies--within the local jurisdiction

Section I. Intergovernmental Coordination

In Burgaw there are two local units of government which provide services to the Town and have authority to levy taxes. These two units are: the Town of Burgaw and the County of Pender. Historically, counties have been responsible for software services (i.e. health, education and welfare) while municipalities were responsible for hardware services (i.e. water, sewer, streets and sanitation). However with a changing demographic picture, both cities and counties have initiated services of both types. The coordination of services between Burgaw and Pender County are nonexistent. However, agreements in several areas should be explored. Possible areas for joint services include recreation, housing rehabilitation, and building inspection to name a few. The degree to which any of these service agreements can be achieved will be determined by the cost involved. The cost in turn can be held to a minimum by land use control. Only Burgaw has authority to regulate the use of land outside of AECs. The Town of Burgaw shall continue to coordinate all plans for its development with those of other governmental

agencies operating in the Town. Coordination in the development of the Land Use Plan between Pender County and Burgaw has been achieved through informal meetings by planning staff and by citizens through attendance at county public meetings.

With the plan formulated, the major task remaining is to establish an implementation program. Through this program, the plan may be translated from concept to reality. This implementation program identifies courses of action which will help achieve the objectives stated in Article III, Section 4, Objectives and Policies for Dealing with Issues.

Subdivision Regulations

Subdivision regulations recently adopted by the Town can insure that proper design standards are met as new areas are developed and that necessary improvements are provided in the subdivision. New home owners are assured that sanitary systems will function properly, that promised paving, storm drainage, curbing, and other improvements will be properly installed, and that accurate markers will be provided for property line surveys. The chief benefit of such regulations is their ability to prevent many future problems, while planned developments are still lines on paper rather than substandard lots sold to unsuspecting purchasers. Furthermore, subdivision regulations would help achieve the following objectives:

1. The encouragement of high standards in areas to be developed for residential purposes.
2. The encouragement of new home construction to increase the housing supply and upgrade the general level of housing quality.
3. The promotion of an attractive community appearance by encouraging visual attractiveness.
4. The establishment of an adequate park and recreation system by encouraging dedication of space in new subdivisions for such purposes.
5. The promotion of safety and a continuous street improvement and construction program by insuring good circulation patterns and design standards in new subdivisions.
6. The utilization of subdivision regulations will encourage orderly and systematic growth of the community.

The Town has adopted subdivision regulations. Enforcement should be given top priority.

Zoning

Zoning regulations are particularly important to shaping land develop-

ment. The ordinance helps to insure that land uses are properly located with respect to one another, that sufficient land is available for each type of use, and that density of development is suitable both to the level of community services available and to the natural features of the land.

Zoning may be enacted by the Town Board and may be enforced within the corporate limits and in the one-mile area. Since the Town's present zoning ordinance is outdated, it should be revised and expanded to include the one-mile area. The new zoning ordinance would aid in the attainment of every goal and objective identified in the goals and objectives section of this plan. Therefore, preparation, adoption, and enforcement of the zoning ordinance should be a top priority item.

Codes Related to Building

Codes establish minimum standards for construction, plumbing, heating, and electrical installations, as well as providing for inspection and for enforcement of these standards. The State of North Carolina has adopted uniform model codes and encourages municipalities to adopt the same or stricter codes. The Town of Burgaw should utilize and rigidly enforce building, electrical, plumbing, heating, health, and sanitary codes. In the one-mile area, the Town may elect to enforce building codes if so desired. If the Town decides not to enforce building codes in the one-mile area, the county could assume responsibility for enforcement. The responsibility for code enforcement in the one-mile area will require further study as to which level of government can provide the service most efficiently and economically. In any case, enforcement of building codes will help achieve the following objectives:

1. The maintaining of high living and building standards of present residential areas exhibiting such characteristics.
2. The encouragement of high living and building standards in areas to be developed for residential purposes.
3. The improvement and promotion of adequate living and building standards in blighted residential areas.

Annexation

It is desirable for development which occurs at urban densities to be inside the corporate limits so that it can benefit from the public services and utilities that such development requires for the health and safety of its residents. However, as has been previously pointed out the Town has

sufficient land within the present corporate limits for growth. Every effort should be made to encourage development to occur within existing city limits where services are presently available.

Housing Improvement

There are many forms of housing assistance programs available to help needy persons provide adequate shelter for themselves and their families. Avenues available for consideration include funds from the Community Development Act of 1974, rehabilitation loans, and home ownership loans available from Farmers Home Administration 502 Program. Other housing improvement measures that may be used include the following:

1. Local organizations, such as civic clubs and the Chamber of Commerce, may help organize and conduct neighborhood clean-up, fix-up, and paint-up campaigns. This should be done on a yearly basis.
2. The town should demolish those vacant housing units that are beyond repair and housing units that have partially been destroyed.
3. All streets in residential areas should be paved with adequate drainage insured.

The preceding actions would help achieve the following objectives:

1. The promotion of an attractive community appearance by improving visual attractiveness throughout the community.
2. The encouragement to improve and promote adequate living and building standards in blighted residential areas.
3. The improvement of the process by which unsafe buildings are condemned and demolished.
4. The encouragement to construct new homes to increase housing supply and upgrade the general level of housing quality.
5. The broadening of the range of housing types available in Burgaw.
6. The emphasizing of safety and a continuous street improvement program.
7. Encourage the use of FHA 502 home ownership loan program available in rural areas. Local FHA office, Post Office Box 328, Burgaw, NC 28425
8. The insuring of good circulation patterns and pedestrian safety.
9. The encouragement of adequate storm drainage.

Commercial Growth

In addition to controlling commercial growth through zoning, the following additional measures may be desirable. These measures will also be helpful in achieving the objectives outlines under the goal of promoting sufficient commercial activity to strengthen the community's tax base and insure continuing growth.

1. Adopt a sign ordinance to insure proper visual appearance in all commercial areas.
2. Improve store front development in the downtown business area through painting and remodelling.

Industrial Growth

In addition to controlling industrial growth through zoning, the following additional measures may be desirable. These measures will also be helpful in achieving the objectives outlined under the goal of promoting sufficient industrial activity to strengthen the community's tax base and insure continuing growth. Furthermore, the first implementation measure may help achieve the following environmental objectives:

1. The development of a program to achieve high water quality.
2. The promotion of an attractive community appearance by improving visual attractiveness throughout the community.
3. The monitoring of all sources of possible water pollution.

Measures to control and promote industrial growth:

1. Work closely with the Pender County Industrial Development Commission.
2. Review industrial prospects by considering such things as noise, visual unsightliness and/or water and air pollution. The Department of Natural and Economic Resources, Division of Environmental Management may be of some assistance in these areas.
3. Review industrial prospects by considering such things as site requirements, traffic generation, transportation needs of the industry, adequate utility services, and adequate buffers.
4. Utilize the Department of Natural and Economic Resources, Division of Community Assistance, Community Development Section in assisting to attract new industries.

Parks, Recreation, and Open Space

The following methods may be employed to implement the ideas relating to parks, recreation, and open space in the plan.

1. The Department of Natural and Economic Resources, Division of Recreation is available to answer questions and provide information on park and recreational development.
2. If additional park land is desirable in the future, the following methods are available to obtain more land.
 - (a) Outright purchase of lands by the city.
 - (b) Encourage dedication or gifts of property for recreational use.

- (c) Purchase and lease back method - a community buys land for future recreational use, but leases it to the former owner or another party until such time as recreational facilities are needed.
 - (d) Pre-emptive buying method - a community may buy a few strategically placed parcels of land which controls additional surrounding acreage by its very nature.
 - (e) Utilize federal and state grants to supplement local budgets for the purchase of additional park acreage.
3. Set aside a sufficient amount of money for recreation equipment and program operation.
 4. Subdivision regulations should require that recreational space be included in large new developments. The zoning regulations can require that recreational areas be included in mobile home parks.
 5. Utilize flood plain zoning in areas subject to flooding. Once this is accomplished, compatible recreational uses may be developed in these areas. The Department of Housing and Urban Development will help determine flood hazard zones through its national flood insurance program.

The preceding implementation measures will also help achieve the following objectives:

1. The establishment of an adequate park and recreation system by encouraging park dedication and public purchase of lands in the planning area that are suitable for recreational purposes.
2. The encouragement of dedication of park and recreation space in new subdivisions.
3. The encouragement of environmental protection by excluding urban development (excluding limited recreational use, farming, or other similar limited activity) from those areas subject to possible flooding.

Transportation

The following measures may be used to implement the ideas established under the thoroughfare section of the plan as well as the attendant objectives listed under the goal of promoting accessibility and safety in area transportation.

1. Utilize Powell Bill funds, local taxes, revenue sharing, and/or bond measures to improve local streets.
2. The town should request the State Highway Commission to develop a thoroughfare plan.
3. Utilize subdivision regulations to guide street development in new residential areas.

General Revenue Sharing

The federal government is returning a certain percentage of the town's tax funds to the town for use as the town board deems appropriate, subject to certain restrictions. These funds can be utilized for many forms of community development projects. Careful consideration should be given the use of these funds in order to discourage the spending of general revenue sharing funds for items and projects which can be financed readily by other means.

Rural Development Act

The United States Congress has recently passed an act giving highest priority to the revitalization and development of rural areas (Public Law 92-419, August, 1972). This act has many provisions which could assist Burgaw in implementing the land development plan, such as loans and grants for community facilities construction, industries, and housing. Money is only now becoming available under the act and all of its sections are not yet funded. However, the town board should become familiar with the act and aggressively seek financial assistance wherever possible.

Citizen Participation

In an effort to make the plan an effective guide for community growth, citizen participation should be encouraged. This should be a continuing process in which community goals and objectives are constantly being reviewed and updated.

Community Facilities and Services

The town should develop a comprehensive policy for the maintenance, improvement, and extension of community facilities and services, such as fire protection, police protection, and water and sewer services.

Section II. Land Classification System

The North Carolina Land Classification System contains five classes of land:

- (a) Developed - Lands where existing population density is moderate to high and where there are a variety of land uses which have the necessary public services.
- (b) Transition - Lands where local government plans to accommodate moderate to high density development during the following ten year period and where necessary public services will be provided to accommodate that growth.
- (c) Community - Lands where low density development is grouped in existing settlements or will occur in such settlements during the following ten year period and which will not require extensive public services now or in the future.
- (d) Rural - Lands whose highest use is for agriculture, forestry, mining, water supply, etc., based on their natural resources potential. Also, lands for future needs not currently recognized.
- (e) Conservation - Fragile, hazard and other lands necessary to maintain a healthy natural environment and necessary to provide for the public health, safety, or welfare.

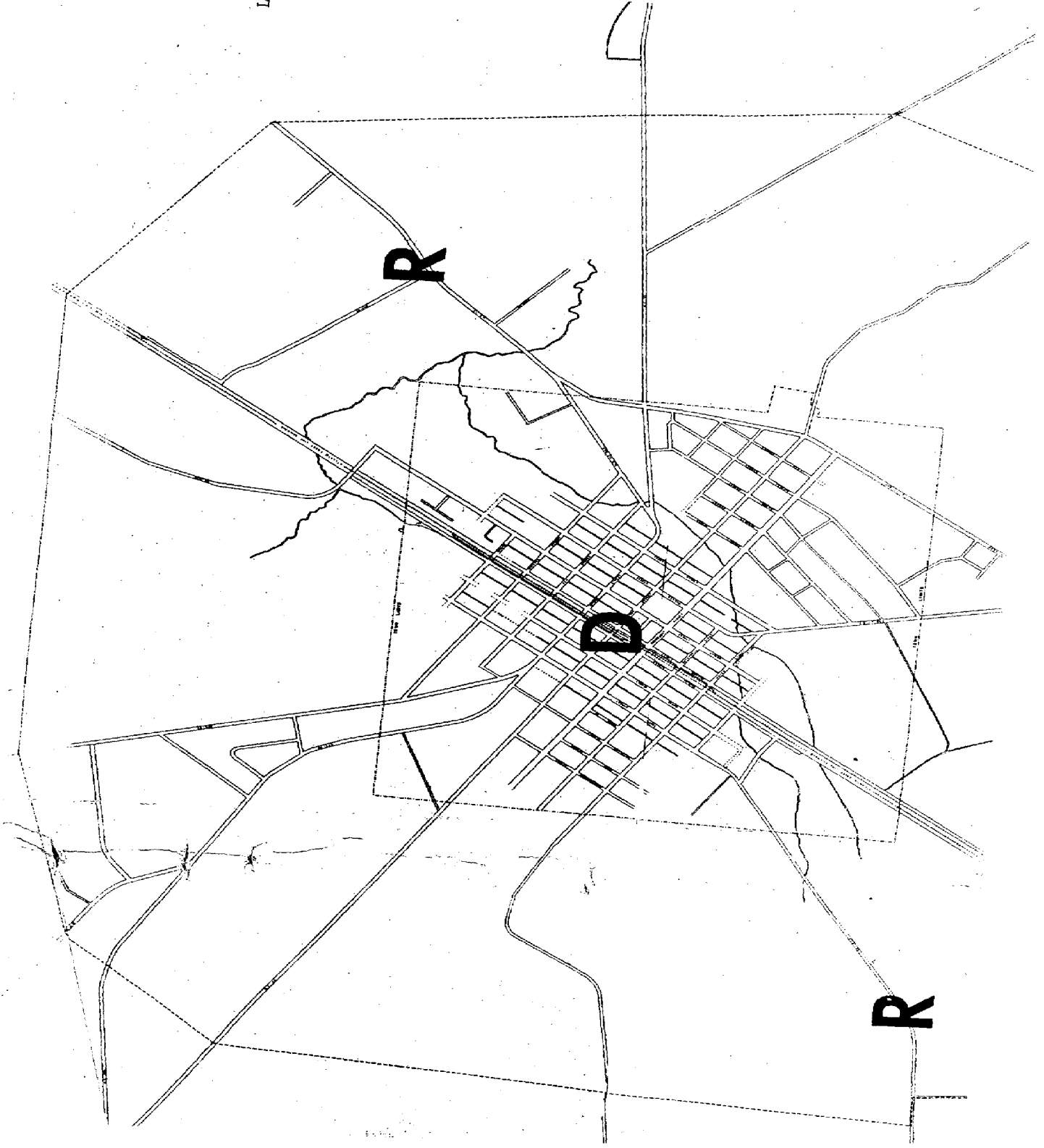
These five classes provide a framework to be used by the Town to identify the general use of all lands within the corporate limits. Such a system presents an opportunity for Burgaw to provide for its need as well as to consider those of the whole State. Also, it is a statement of policy on where and to what density we want growth to occur, and where we want to conserve the Town's natural resources by guiding growth.

Since an objective as stated in the section "Objectives and Policies, to Deal with Issues", is to encourage development within the existing corporate limits and avoid urban sprawl, then it is reasonable to demand that new growth occur in the Developed Land Class (where water and sewer service is available and the density is 3.8 persons per acre using developed acreage). Furthermore, there are 487 acres of undeveloped land within the corporate limits - more than an adequate amount of land area to accommodate unanticipated as well as anticipated growth for the Town of Burgaw. Consequently, the Developed Land Class is allocated all the proposed development which coincides with city limits. See the Land Classification Map on the next page.

LAND CLASSIFICATION MAP

D - DEVELOPED

R - RURAL



Section III. Areas of Environmental Concern

There are no areas of Environmental Concern in the Burgaw Planning Area as defined by State Guidelines.

Section IV. Location and Development Standards

These standards serve two purposes: as a basis for the Land Use Plan and as a guide to public officials and citizens for evaluating development proposals. These standards state where the various land uses should be located and how land should be developed for each land use.

Residential areas should:

- have public water and sewer service within corporate limits
- have minimum lot sizes where community/public water and sewer service is unavailable - 20,000 square feet; if either water and sewer facilities are available but not both - 15,000 square feet
- be bound but not crossed by major thoroughfares
- construct utilities including electric and telephone lines underground, where the ground water table prohibits underground electric wires, utility poles should follow rear property lines
- not locate in flood prone areas or in the case of beach communities should be above minimum building elevation and flood proofed as determined by HUD - Federal Insurance Administration
- provide locations for churches, schools, recreation, and neighborhood serving stores near their center
- be buffered from other land uses

Commercial areas should:

- locate near intersections of major thoroughfares to better serve trade areas

- not be permitted to develop in strips, but rather in compact, grouped and consolidated into functional units
- provide adequate off-street parking with designated entrances and exits

3 to 6 acres in size while for community shopping centers from 10 to 30 acres in size

- have compatible signs which do not obstruct sight

Office and institutional areas should:

- serve as buffers between residential areas and commercial or industrial uses
- located in planned office and institutional parks
- have adequate off-street parking facilities
- have compatible signs which do not obstruct sight

Industrial areas should:

- locate on nearly level ground; generally not more than 5%
- be well drained and on good load bearing soil
- locate where public water, sewer and other utilities are available
- locate near railroads, major thoroughfares, airports, navigable waters, and major utility and transmission lines
- provide sites large enough for expansion
- have property owner commitment at a set price

ARTICLE VII - CONCLUSION

The Land Use Plan culminates six months work by the Burgaw Planning Board and Planning Advisor, plus the substance of several public meetings and surveys where input was given by citizens.

Obstacles to present and future development are clearly identified. Means and methods for dealing with development problems are recommended. The protection of the public health, safety, and welfare of present and future residents can be assured provided Town Council implements the recommendations listed herein as development policy.

Major conclusions of the Land Use Plan are:

- Present development can be classified as very low with approximately 487 acres available for development within the corporate limits.
- Burgaw requires the professional services of full-time qualified personnel to insure the efficient and wise management of the community's resources.
- Burgaw and Pender County have coordinated very few services.
- Recreation facilities are non-existent.
- Drainage, wastewater treatment, and housing conditions are in need of improvement.
- Burgaw planning area is without Areas of Environmental Concern as defined in the State Guidelines

APPENDIX

CITIZEN OPINION SURVEY

FOR THE

TOWN OF BURGAW

Burgaw is preparing a land use plan in order to comply with the requirements of the Coastal Area Management Act of 1974. One of the most important aspects of land use planning is that the plan adequately reflects citizen opinions and attitudes toward the use of the community's land--both public and private. The following survey is intended to give each citizen the opportunity to express his opinion on land use problems and issues. Your cooperation in answering the following questions will be appreciated.

Upon completing the questionnaire, please return to:

Mrs. Ethel J. Wells
Town Clerk
Town Hall
Burgaw, N.C. 28423

1. Are you a permanent resident of Burgaw? () yes () no
2. What is your age? _____
3. Do you live in a: () single-family house
() duplex
() mobile home
() apartment
4. During the next five years would you like to see the population of Burgaw --
() increase greatly
() increase slightly
() decrease greatly
() decrease slightly
() stay the same
5. Which of the following types of development would you like to see more or less of in Burgaw?

	<u>More</u>	<u>Less</u>
single-family housing	()	()
apartments	()	()
condominiums	()	()
mobile homes	()	()
commercial	()	()
industrial	()	()
public open space	()	()
public recreation facilities	()	()
(playgrounds and parks)		
other (specify) _____		

6. For what reasons did you choose to live in Burgaw?

- () close to work
- () pleasant surroundings
- () low taxes
- () reasonably priced land and house
- () close to family and friends
- other _____

7. In which of the following areas do you feel more public funds should be spent?

	<u>More</u>	<u>Less</u>
water and sewer	()	()
garbage collection	()	()
fire and police protection	()	()
schools	()	()
parks and recreational facilities and programs	()	()
roads or public transit	()	()
environmental protection	()	()
industrial development	()	()
town management	()	()
storm drainage	()	()
other	_____	_____

8. What do you like most about Burgaw?

9. What do you like least about Burgaw?

10. Is there any particular area or type of area within the Town limits or within one mile of the Town limits that you feel is unique or special and should be preserved or protected in its present state or form?

11. Please use the following space to make any additional comments you would like.

Thank you for your help and cooperation. This questionnaire should be returned to the Town Hall by May 15th.

Rare and Endangered Species

Pender County

Amphibians

Pine barrens treefrog Hyla andersoni; preferred habitat: shrub bogs, pocosins; general comments: habitat damage may seriously deplete species disjunct populations N. J., N. C., and S. C.; status: undetermined

Reptiles

Coral snake Micrurus fulvius; general comments: very secretive, N. C. northern limit range; status: peripheral-rare in N. C.

Vascular Plants

Hypoxis sessilis; preferred habitat: savannahs; general comments: very rare in N. C.; status: rare

Thalictrum cooley; preferred habitat: savannahs; general comments: very rare in N. C. (only place it is found); status: rare

Source: N. C. Dept. of Natural and Economic Resources Preliminary
List of Endangered Plant and Animal Species in North Carolina June, 1973

DATE DUE			
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